MAGNETIC NAVIGATION SYSTEM

ABSTRACT OF THE DISCLOSURE

A magnetic navigation system for orienting a magnetically responsive device in an operating region in a subject has at least two magnet units and a support for mounting the at least two magnet units for movement relative to the subject, the support supporting the at least two magnet units adjacent the operating region in the subject at locations to apply a magnetic field to the operating region. Each magnet unit includes sing a magnet and a positioner for selectively changing the position of the magnet. The system also includes a control for operating the positioners of each magnet unit to selectively change the positions of the magnets to maintain the magnetic field direction applied to the operating region by the magnets as the locations of the magnet units relative to the operating region change. The system is adapted for implementing a method of navigating according to the present invention in which the magnets in the magnet units are selectively rotated and pivoted to maintain the appropriate magnetic field direction projected by the magnets to maintain the device direction as the magnet units move on the support about the operating region.